

The International Journal of
Nautical Archaeology

and Underwater Exploration

Volume 9, 1980

U.I.C.C.
DEC 31 1980
LIBRARY

Published for the Council for Nautical Archaeology
by Academic Press London New York Toronto Sydney
San Francisco

Editor

Joan du Plat Taylor

Assistant Editor

James Kirkman

Advisory Editors

Béat Arnold John Ashdown George Bass David Blackman Brian Dolley Honor Frost
Sally Humphreys Gerhard Kapitän Nigel Kelland Peter Marsden

Reviews Editor

Angela Croome

News Editors

J. Green
A. J. Parker
R. Smith
J. Weeks

Contents of Volume 9

Editorial		1
Another view of the ancient rudder	Jacques Thurneyssen	3
The <i>Kennemerland</i> site. A report on the lead ingots	R. Price, K. Muckelroy and L. Willies	7
The Forty Cannon Wreck, Chinchorro Banks, Quintana Roo, Mexico. A preliminary report 1978	Jack B. Irion	27
Side-scan sonar in Lake Champlain, Vermont, USA	Marc A. Théorêt	35
The armament from the <i>Batavia</i> . 1. Two composite guns	J. N. Green	43
On the problem of the preservation of human bone in sea-water	G. & S. Arnaud, A. Ascenzi, E. Bonucci and G. Graziani	53
Systematic registration of older sinkings and wrecks in Swedish waters	Carl Olof Cederlund	95
The Jerusalem ship, <i>ISIS MYRIONYMOS</i> and the True Cross	S. W. Helms	105
<i>Hemiolia, trihemiolia</i>	J. S. Morrison	121
Three terracotta braziers from the sea off Sicily	Gerhard Kapitän	127
Archaeological underwater investigation in 1977–78 of the remains of an early medieval bridge, Bobecin, Stupsk district, Poland	Andrzej Kola and Gerard Wilke	133
Maritime archaeology applications for a programmable calculator	Jeremy Green	139
Conservation and maritime archaeology	C. Pearson	147
Editorial		181
The Caergwrle Bowl—A possible prehistoric boat model	G. T. Denford and A. W. Farrell	183
Kyholm 78. A joint archaeological geological investigation around a 13th century wreck at Kyholm, Samsø, Denmark	Ole Crumlin-Pedersen, Lis Nymark and Christian Christiansen <i>et al.</i>	193
'The Copper Wreck'. The wreck of a medieval ship raised by the Central Maritime Museum in Gdańsk, Poland	Jerzy Litwin	217
The Yorktown shipwreck archaeological project: results from the 1978 survey	John D. Broadwater	227
Editorial		275
Obituary		
Keith Muckelroy		276
A prehistoric coracle in Fife	Trevor Watkins	277
The Thera waterborne procession reconsidered	S. Wachsmann	287
Sewn boats in the western Indian Ocean, and a survival in Somalia	Neville Chittick	297
On oral tradition and place names. An introduction to the first stage in the establishment of a register of ancient monuments for the maritime cultural heritage	Christer Westerdahl	311
Water-penetration aerial photography	Douglas G. Richards	331
Notes		
Copper ingots and marine copper	R. F. Tylecote	67
Two-masted Greek ships	L. Casson	68
Mediterranean hull types compared 4: An unusual type of construction. The hull of wreck 1 at Bon Porté	O. Jestin and F. Carrazé	70
Stone anchor-shanks in the Western Indian Ocean	N. Chittick	73
Hydraulic probing: one solution to overburden and environment	G. P. Watts, Jr.	76
Museum Report 8	J. Green	81
Ours is to reason why: The iconography of ancient ships	A. F. Tilley and V. H. Fenwick	151
The Bronze Age site off Moor Sand, Salcombe, Devon. An interim report on the 1979 season	Keith Muckelroy and Philip Baker	155

Finds from the wreck of HMS <i>Pandora</i>	Graeme Henderson	237
Phoenician joints, <i>coagmenta punicana</i>	A. W. Sleeswyk	243
A Roman wreck off Cap del Vol, Gerona, Spain	Federico Foerster	244
Another view of the ancient rudder, <i>IJNA</i> 9: 3-6	Federico Foerster	253
The Goodwins wreck	D. J. Lyon	339
Two further boat finds in the Snowdon Lakes	J. S. Illsley and O. T. P. Roberts	342
News		85, 159, 254, 349
Reviews		
Atkinson, I. <i>The Viking ships</i>	(Christensen)	87
Bonino, M. <i>Archeologia e tradizione navale tra la Romagna e il Po</i>	(Dolley)	88
du Plat Taylor, J. and Cleere, H. (Eds) <i>Roman shipping and trade: Britain and the Rhine Provinces</i>	(Millett)	88
McCaslin, D. <i>Hala Sultan Tekke 4; the underwater report</i>	(Green)	89
McKee, A. <i>The Queen's corsair; Drake's journey of circumnavigation 1577-1580</i>	(Martin)	90
Roland, A. <i>Underwater warfare in the age of sail</i>	(Bathe)	90
Clarke, D. L. <i>Analytical archaeology</i>	(Muckelroy)	91
Spengemann, F. <i>Die Seeschiffe der Hannoverischen Weserflotte</i>	(Robinson)	92
Scranton, R., Shaw, J. W. and Ibrahim, L. <i>Kenchreai, eastern port of Corinth</i>	(Blackman)	173
Crumlin-Pedersen, O. and Finch, R. <i>From Viking ship to Victory</i>	(Christensen)	175
Ketting, H. <i>Prins Willem. Een zeventiende-eeuwse Oostindievaarder</i>	(Green)	175
Davis, R. <i>The rise of the English shipping industry in the seventeenth and eighteenth centuries</i>	(Davies)	176
Meyer, J. <i>Segelschiffe auf alten Postkarten</i>	(Robinson)	176
Muckleroy, K. <i>Maritime archaeology</i>	(Green)	178
Haslam, J. <i>Medieval pottery</i>	(Ashdown)	178
Liou, B. (Ed.) <i>Archaeonautica 2</i>	(Parker)	267
Peacock, D. P. S. (Ed.) <i>Pottery and early commerce, characterization and trade in Roman and later ceramics</i>	(Arthur)	268
Fioravanti, A. and Camerini, E. <i>L'abitato Villanoviano del Gran Carro sommerso nel Lago di Bolsena (1959-77)</i>	(Ridgway)	269
Howard, F. <i>Sailing ships of war</i>	(McKee)	269
Barto Arnold III, J. and Weddle, R. <i>The nautical archaeology of Padre Island: the Spanish shipwrecks of 1554</i>	(Martin)	270
McDonald, D. and Barto Arnold III, J. <i>Documentary sources for the wreck of the New Spain fleet of 1554</i>	(Martin)	272
Wheeler, R. C., Kenyon, W. A., Woolworth, A. R. and Birk, D. A. <i>Voices from the rapids: an underwater search for fur trade artefacts 1960-73</i>	(Williams)	272
Phillips-Birt, D. <i>The building of boats</i>	(Howard)	351
Kaiser, J. <i>Segler im Gezeitenstrom. Die Biografie der hölzernen Ewer</i>	(Robinson)	352
Elliott, C. <i>Sailing fishermen in old photographs and Steam fishermen in old photographs</i>	(Osler)	353
Cederlund, C. O. <i>Ett fartyg byggt med syteknik: en studie i marinarkeologisk dokumentation</i>	(Weeks)	354
McGrail, S. <i>Logboats of England and Wales with comparative material from European and other countries</i>	(Weeks)	354
Books and periodicals received		26, 274
Periodical notes		42, 52, 66, 132, 146, 226, 236, 296, 310, 330, 338, 356
Notices		94, 138, 180, 329
Index		357